

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,213,479 B2  
APPLICATION NO. : 10/785130  
DATED : May 8, 2007  
INVENTOR(S) : Mitsui

Page 1 of 3

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 2:

- Line 20, change "ups-and-downs" to -- up-and-down --.
- Line 25, change "ups-and-downs" to -- up-and-down --.
- Line 35, change "A vibration proof" to --A vibration-proof--.
- Line 55, change "constant  $K_1$  and  $K_2$  are" to --constants  $K_1$  and  $K_2$  are--.
- Line 56, change "a negligibly small values" to --negligibly small values--.

Column 4:

- Line 2, change "the second the vibratory" to --the second vibratory--.

Column 5:

- Lines 23-24, change "vibration proof rubber" to --vibration-proof rubber--.
- Lines 24-25, change "such as an hydraulic" to --such as a hydraulic--.
- Line 30, change "Each of bearings" to --Each of the bearings--.
- Line 37, change "such as an hydraulic" to --such as a hydraulic--.

Column 6:

- Line 39, change "one of shoulders" to --one of the shoulders--.
- Line 40, change "20 eccentric weight" to --eccentric weight--.
- Line 41, change "anti-clockwise" to --anticlockwise--.
- Line 51, change "one of fixed" to --one of the fixed--.

Column 7:

- Line 10, change "at opposing-ends across" to --at opposing ends across--.
- Line 13, change "one of shoulders" to --one of the shoulders--.
- Line 67, change "anti-clockwise" to --anticlockwise--.

Column 8:

- Line 3, change "one of shoulders" to --one of the shoulders--.
- Line 5, change "the center of the gravity" to --the center of gravity--.
- Line 10, change "anti-clockwise" to --anticlockwise--.
- Line 13, change "the other of shoulders" to --the other of the shoulders--.
- Line 21, change "anti-clockwise" to --anticlockwise--.
- Line 54, change "rotate in anticlockwise" to --rotate anticlockwise--.
- Line 61, change "rotate in anticlockwise" to --rotate anticlockwise--.

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Column 9:

- Line 42, after " $(m_3r_3+m_4r_4)$ " insert a period.
- Line 44, change "lower-side" to --lower side--.
- Line 48, change "**FIG.3A** through **FIG. 3D** illustrates" to --**FIG.3A** through **FIG. 3D** illustrate--.
- Line 59, change "difference of them" to --difference between them--.

Column 10:

- Line 9, change "rotate in clockwise" to --rotate clockwise--.
- Line 12, change "lower-side" to --lower side--.
- Line 28, change "rotate in anticlockwise" to --rotate anticlockwise--.
- Line 31, change "lower-side" to --lower side--.
- Line 64, change "because of following-reasons." to --because of the following reasons. --.

Column 11:

- Line 15, change "the drum weights" to --the drum weight--.
- Line 18, change "ups-and-downs directions" to -- up-and-down directions--.
- Line 25, delete " $\therefore mr(\text{stan-})$ ".
- Line 26, change "dard" to -- $\therefore mr(\text{standard-})$ --.
- Line 57, change "(horizontal vibration))/" to --(horizontal vibration))/155--.
- Line 58, delete "155"; change "vibration)=0.31" to --vibration)= 0.31--.

Column 12:

- Line 67, change "anti-clockwise" to --anticlockwise--.

Column 13:

- Line 23, change "inside-circumference" to --inside circumference--.
- Line 38, change "eccentric moment  $m_3r_3$ " to --eccentric moment  $m_3r_3$ --.
- Line 58, change "numbers of the vibratory shaft" to --numbers of vibratory shafts--.

Column 14:

- Line 5, change "Although there have" to --Although there has--.

Column 15:

- Line 13, change "fixed to first the" to --fixed to the first--.
- Line 17, change "fixed to second the" to --fixed to the second--.

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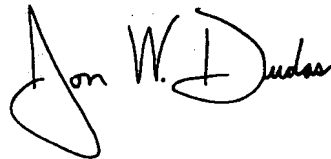
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 16:

Line 14, change "are asymmetrically located" to --are axisymmetrically located--.

Signed and Sealed this

Fourteenth Day of August, 2007

A handwritten signature in black ink, reading "Jon W. Dudas". The signature is stylized, with the first name "Jon" and last name "Dudas" clearly legible, and "W." in the middle. The ink is dark and the background is white.

JON W. DUDAS  
*Director of the United States Patent and Trademark Office*